



Table 1.

Alignment of human Slit-1 (SEQ ID NO:02), human Slit-2 (SEQ ID NOS:03-06), Drosophila Slit-1 (SEQ ID NO:07), C. elegans Slit-1 (SEQ ID NOS:08-09), mouse Slit-2 (SEQ ID NOS:10-11) and mouse Slit-1 (SEQ ID NOS:12-14).

7460X

1 M A A P S R T T L M P P P F R L Q L R L - L I L P I L L L L R H D A V H A E P Y D-Slit
1 M R G V G W Q - - - - - M L S L S L G L V L A I L - - - - - H-Slit1

40 S G G F G S S A V S S G G L G S V G I H I P G G V G V I T E A R C P R V C S C D-Slit
21 - - - - - N K V A P Q A C P A Q C S C H-Slit1

80 T G L N V D C S H R G L T S V P R K I S A D V E R L E L Q G N N L T V I Y E T D D-Slit
35 S G S T V D C H G L A L R S V P R N I P R N T E R L D L N G N N I T R I T K T D H-Slit1

120 F Q R L T K L R M L Q L T D N Q I H T I E R N S F Q D L V S L E R L - - - - - D-Slit
75 F A G L R H L R V L Q L M E N K I S T I E R G A F Q D L K E L E R L R L N R N H H-Slit1
1 - - - - - H L R V L Q L M E N R I S T I E R G A F Q D L K E L E R L R L N R N M-Slit1

154 - - - - - D I S N N V I T T V G R R V F K G A Q S L R D-Slit
115 L Q L F P E L L F L G T A K L Y R L D L S E N Q I Q A I P R K A F R G A V D I K H-Slit1
36 L Q L F P E L L F L G T A R L Y R L D L S E N Q I Q A I P R K A F R G A V D I K M-Slit1

176 S L Q L D N N Q I T C L D E H A F K G L V E L E I L T L N N N N L T S L P H N I D-Slit
155 N L Q L D Y N Q I S C I E D G A F R A L R D L E V L T L N N N N I T R L S V A S H-Slit1
76 N L Q L D Y N Q I S C I E D G A F R A L R D L E V L T L N N N N I T R L S V A S M-Slit1

216 F G G L G R L R A L R L S D N P F A C D C H L S W L S R F L R S A T R L A P Y T D-Slit
195 F N H M P K L R T F R L H S N N L Y C D C H L A W L S D W L R K R P R V G L Y T H-Slit1
116 F N H M P K L R T F R L H S N N L Y C M-Slit1

256 R C Q S P S Q L K G Q N V A D L H D Q E F K C S G L T E - H A P M - - - E C G A D-Slit
235 Q C M G P S H L R G H N V A E V Q K R E F V C S D E E E G H Q S F M A P S C S V H-Slit1

292 E N S C P H P C R C A D G I V D C R E K S L T S V P V T L P D D T T D V R L E Q D-Slit
275 L H - C P A A C T C S N N I V D C R G K G L T E I P T N L P E T I T E I R L E Q H-Slit1
1 - - - - - S P C T C S N N I V D C R G K G L M E I P A N L P E G I V E I R L E Q H-Slit2

332 N F I T E L P P K S F S S F R R L R R I D L S N N N I S R I A H D A L S G L K Q D-Slit
314 N T I K V I P P G A F S P Y K K L R R I D L S N N Q I S E L A P D A F Q G L R S H-Slit1
36 N S I K A I P A G A F T Q Y K K L K R I D I S K N Q I S D I A P D A F Q G L K S H-Slit2

372 L T T L V L Y G N K I K D L P S G V F K G L G S L R L L L L N A N E I S C I R K D-Slit
354 L N S L V L Y G N K I T E L P K S L F E G L F S L Q L L L L N A N K I N C L R V H-Slit1
76 L T S L V L Y G N K I T E I A K G L F D G L V S L Q L L L L H-Slit2

1 R C E-Slit
412 D A F R D L H S L S L L S L Y D N N I Q S L A N G T F D A M K S M K T V H L A K D-Slit
394 D A F Q D L H N L N L L S L Y D N K L Q T I A K G T F S P L R A I Q T M H L A Q H-Slit1

46

2 NPXICDCNLQWLAQINLQKN IETSGARCEQPKRRLRKKKFA CE-Slit
 452 NPFICDCNLRWLADY LHK NPIETSGARCESPKRMHRRRIE D-Slit
 434 NPFICDC H L K W L A D Y L H T N P I E T S G A R C T S P R R L A N K R I G H-Slit1

42 T L P P N K F K C K G S E S F V S M Y A D S C F I D S I C P T Q C D C Y G T T V CE-Slit
 492 S L R E E K F K C S - W G E L R M K L S G E C R M D S D C P A M C H C E G T T V D-Slit
 474 Q I K S K K F R C S G T E D Y R S K L S G D C F A D L A C P E K C R C E G T T V H-Slit1

82 D C N K R G L N T I P T S I P R F A T Q L L L S G N N I S T V D L N S N I H V L CE-Slit
 531 D C T G R R L K E I P R D I P L H T T E L L L N D N E L G R I S S D G L F G R L D-Slit
 514 D C S N Q K L N K I P E H I P Q Y T A E L R L N N N E F T V L E A T G I F K K L H-Slit1

122 E N L E X L D L S N N H I T F I N D K S F E K L S K L R E L X L N D - - - - - CE-Slit
 571 P H L V K L E L K R N Q L T G I E P N A F E G A S H I Q E L Q L G E N K I K E I D-Slit
 554 P Q L R K I N F S N N K I T D I E E G A F E G A S G V N E I L L T S N R L E N V H-Slit1
 1 - - - - - E G A F N G A A S V Q E L M L T G N Q L E T V H-Slit2

611 S N K M F - - - - - L G L H Q L K T L N D-Slit
 594 Q H K M F K G - L E S L K T L M L R S N R I T C V G N D S F I G L S S V R L L S H-Slit1
 24 H G R G F R G L S G L K T L M L R S N L I G C V S N D T F A G L S S V R L L S H-Slit2

626 L Y D N Q I S C V M P G S F E H L N S L T S L N L A S N P F N C N C H L A W - F D-Slit
 633 L Y D N Q I T T V A P G A F D T L H S L S T L N L L A N P F N C N C Y L A W - L H-Slit1
 64 L Y D N R I T T I T P G A F T T L V S L S T I N L L S N P F N C N C H L G A G L H-Slit2

665 A E C V R K K S L N G G A A R C G A P S K V R D V Q I K D L P H S E F K C S S E D-Slit
 672 G E W L R K K R I V T G N P R C Q K P Y F L K E I P I Q D V A I Q D F T C D D G H-Slit1
 104 G K W L R K R R I V S G N P R C Q K P F F L K E I P I Q G V G H P G I H-Slit2

1 S N K N L T S F P S R I P F D CE-Slit
 705 N S E - G C L G D G Y C P P S C T C T G T V V A C S R N Q L K E I P R G I P A E D-Slit
 712 N D D N S C S P L S R C P T E C T C L D T V V R C S N K G L K V L P K G I P R D H-Slit1

16 T T E L Y L D A N Y I N E I P A H D L N R L Y S L T K L D L S H N R L I S L E N CE-Slit
 744 T S E L Y L E S N E I E Q I H Y E R I R H L R S L T R L D L S N N Q I T I L S N D-Slit
 752 V T E L Y L D G N Q F T L V P K E - L S N Y K H L T L I D L S N N R I S T L S N H-Slit1

56 N T F S N L T R L S T L I I S Y N K L R C L Q P L A F N G L N A L R I L S L H G CE-Slit
 784 Y T F A N L T K L S T L I I S Y N K L Q C L Q R H A L S G L N N L R V V S L H G D-Slit
 791 Q S F S N M T Q L L T L I L S Y N R L R C I P P R T F D G L K S L R L L S L H G H-Slit1

96 N D I S F L P Q S A F S N L T S I T H I A V G S N S L Y C D C N M A W F S K W I CE-Slit
 824 N R I S M L P E G S F E D L K S L T H I A L G S N P L Y C D C G L K W F S D W I D-Slit
 831 N D I S V V P E G A F N D L S A L S H L A I G A N P L Y C D C N M Q W L S D W V H-Slit1

136 K S K F I E A G I A R C E Y P N T V S N Q L L L T A Q P Y Q F T C D S K V P T K CE-Slit
 864 K L D Y V E P G I A R C A E P E Q M K D K L I L S T P S S S F V C R G R V R N D D-Slit
 871 K S E Y K E P G I A R C A G P G E M A D K L L L T T P S K K F T C Q G P V D V N H-Slit1

176 L A T K C D L C L N S P C K N N A I C E T T S S R K Y T C N C T P G F Y G V H C CE-Slit
904 I L A K C N A C F E Q P C Q N Q A Q C V A L P Q R E Y Q C L C Q P G Y H G K H C D-Slit
911 I L A K C N P C L S N P C K N D G T C N S D P V D F Y R C T C P Y G F K G Q D C H-Slit1

216 E N Q I D A C Y G S P C L N N A T C K V - - A Q A G R F N C Y C N K G F E G D Y CE-Slit
944 E F M I D A C Y G N P C R N N A T C T V - - L E E G R F S C Q C A P G Y T G A R D-Slit
951 D V P I H A C I S N P C K H G G T C H L K E G E E D G F W C I C A D G F E G E N H-Slit1

254 C E K N I D D C V N S - K C E N G G K C V D L V R F C S E E L K N F Q S F Q I N CE-Slit
982 C E T N I D D C L G E I K C Q N N A T C I D - - - - - G V E D-Slit
991 C E V N V D D C - E D N D C E N N S T C V D - - - - - G I N H-Slit1

293 S Y R C D C P M E Y E G K H C E D K L E Y C T K K L N P C E N N G K C I P I N G CE-Slit
1007 S Y K C E C Q P G F S G E F C D T K I Q F C S P E F N P C A N G A K C M D H F T D-Slit
1015 N Y T C L C P P E Y T G E L C E E K L D F C A Q D L N P C Q H D S K C I L T P K H-Slit1
D P L P V M-Slit2

333 S Y S C M C S P G F T G N N C E T N I D D C K N V E C Q N G G S C V D G I L S Y CE-Slit
1047 H Y S C D C Q A G F H G T N C T D N I D D C Q N H M C Q N G G T C V D G I N D Y D-Slit
1055 G F K C D C T P G Y V G E H C D I D F D D C Q D N K C K N G A H C T D A V N G Y H-Slit1
1 N N D D C V G H K C R H G A Q C V D E V N G Y M-Slit1
1 W P R C E C M P G Y A G D N C S E N Q D D C R D H R C Q N G A Q C M D E V N S Y H-Slit2
6 H H R C E C M L G Y T G D N C S E N Q D D C K D H K C Q N G A Q C V D E V N S Y M-Slit2

373 D C L C R P G Y A G Q Y C E I P P M M D M E Y Q K T D A C Q Q S A C G Q G - E C CE-Slit
1087 Q C R C P D D Y T G K Y C E G H N M I S M M Y P Q T S P C Q N H E C K H G V - C D-Slit
1095 T C I C P E G Y S G L F C E F S P - - P M V L P R T S P C D N F D C Q N G A Q C H-Slit1
24 T C I C P Q G F S G L F C E H P P - - P M V L L Q T S P C D Q Y E C Q N G A Q C M-Slit1
41 S C L C A E G Y S G Q L C E I P P - - H L P A P K - S P C E G T E C Q N G A N C H-Slit2
46 A C L C V E G Y S G Q L C E I P P - - - - - A P R - S S C E G T E C Q N G A N C M-Slit2

412 V A S Q N - S S D F T C K C H E G F S G P S C D R Q M S V G F K N P G A Y L A L CE-Slit
1126 F Q P N A Q G S D Y L C R C H P G Y T G K W C E Y L T S I S F V H N N S F V E L D-Slit
1133 I V R I N E P - - - I C Q C L P G Y Q G E K C E K L V S V N F I N K E S Y L Q I H-Slit1
62 I V V Q Q E P - - - T C R C P P G F A G P R C E K L I T V N F V G K D S Y V E L M-Slit1
78 V D Q G N R P - - - V C Q C L P G F G G P E C E K L L S V N F V D R D T Y L Q F H-Slit2
80 V D Q G S R P - - - V C Q C L P G F G G P E C E K L L S V N F V D R D T Y L Q F M-Slit2

451 D P L A S - - D G T I T M T L R T T S K I G I L L Y Y G D D H F V S A E L Y D G CE-Slit
1166 E P L R T R P E A N V T I V F S S A E Q N G I L M Y D G Q D A H L A V E L F N G D-Slit
1170 P S A K V R P Q T N I T L Q I A T D E D S G I L L Y K G D K D H I A V E L Y R G H-Slit1
99 A S A K V R M-Slit1
115 T D L Q N W X R X N I T L Q V F T A E D N G I L L Y N G G N D H I A V X L Y X G H-Slit2
117 T D L Q N W P R A N I T L Q V S T A E D N G I L L Y N G D N D H I A V E L Y M-Slit2

489 R V K L V Y Y I G N F P A S H M Y S S V K V N D G L P H R I S I R T S E R K C F CE-Slit
1206 R I R V S Y D V G N H P V S T M Y S F E M V A D G K Y H A V E L L A I K K N F T D-Slit
1210 R V R A S Y D T G S H P A S A I Y S V E T I N D G N F H I V E L L A L D Q S L S H-Slit1
155 H V R F S Y H-Slit2

529 L Q I D K N P V Q I V E N S G K S D Q L I T K G K E M L Y I G G L P I E K S Q D CE-Slit
1246 L R V D R G L A R S I I N E G S N D Y L - - K L T T P M F L G G L P V D P A Q Q D-Slit
1250 L S V D G G N P K I I T N L S K Q S T L - - N F D S P L Y V G G M P G K S N V A H-Slit1
1 I L - - - - - D V A M-Slit1

569 A K R R F H V K N S E S L K G C I S S I T I N E V P I N L Q Q A L E N V N T E Q CE-Slit
 1284 A Y K N W Q I R N L T S F K G C M K E V W I N H K L V D F G N A Q R Q Q K I T P D-Slit
 1288 S L R Q A P G Q N G T S F H G C I R N L Y I N S E L Q D F Q K V P M Q T G I L P H-Slit1
 6 S L R Q A P G E N G T S F H G C I R N L Y I N S E L Q D F R K M P M Q T G I L P M-Slit1

609 S C - - - - - S A T V N F - - - - - CE-Slit
 1324 G C A L - - - - L E G E Q Q E E E D D E Q D F M D E - - - - - T P H I K E E P D-Slit
 1328 G C E P C H K K V C A H G T C Q P S S Q A G F T C E C Q E G W M G P L C D Q R T H-Slit1
 46 G C E P C H K K V C A H G C C Q P S S Q S G F T C E C E E G W M G P L C D Q R T M-Slit1

617 - - - C A G I D C G N G - K C T N N A L S P K G Y M C Q C D S H F S G E H C D E CE-Slit
 1354 V D P C L E N K C R R G S R C V P N S N A R D G Y Q C K C K H G Q R G R Y C D Q D-Slit
 1368 N D P C L G N K C V H G T - C L P I N A F - - S Y S C K C L E G H G G V L C D E H-Slit1
 86 N D P C L G N K C V H G T - C L P I N A F - - S Y S C K C L E G H G G V L C D E M-Slit1

653 - - - - - CE-Slit
 1394 G E G S T E P - - - - - P T V T A A S - - D-Slit
 1405 E E D L F N P C Q A I K C K H G K C R L S G L G Q P Y C E C S S G Y T G D S C D H-Slit1
 123 E E D L F N P C Q M I K C K H G K C R L S G V G Q P Y C E C N S G F T G D S C D M-Slit1
 1 - - - - - Q C H I S D Q G E P Y C L C Q P G F S G E H C Q H-Slit2
 1 - - - - - A F K C H H G Q C H I S D R G E P Y C L C Q P G F S G H H C E M-Slit2

655 K R I K C D K Q K F R R H H I E N E - - - - C R S V D R I K I A E C N G Y C G G CE-Slit
 1405 T - - - C R K E Q V R E Y Y T E N D - - - - C R S R Q P L K Y A K C V G G C G - D-Slit
 1445 R E I S C R G E R I R D Y Y Q K Q Q G Y A A C Q T T K K V S R L E C R G G C A G H-Slit1
 163 R E I S C R G E R I R D Y Y Q K Q Q G Y A A C Q T T K K V S R L E C R G G C A G M-Slit1
 25 Q E N P C L G Q V V R E V I R R Q K G Y A S C A T A S K V P I M E C R G G C - G H-Slit2
 32 Q E N P C M G E I V R E A I R R Q K D Y A S C A T A S K V P I M E C R G G C - G M-Slit2

689 E Q N C C T A V K K K Q R K V K M I C K N G T T K I S T V H I I R Q C Q C E P T CE-Slit
 1440 - N Q C C A A K I V R R R K V R M V C S N N R K Y I K N L D I V R K C G C - - T D-Slit
 1485 G Q - C C G P L R S K R R K Y S F E C T D G S S F V D E V E K V V K C G C T R - H-Slit1
 203 G Q - C C G P L R S K R R K Y S F E C T D G S S F V D E V E K V V K C G C A R - M-Slit1
 64 P Q - C C Q P T R S K R R K Y V F Q C T D G S S F V E E V E R H L E C G C L A - H-Slit2
 71 T T - C C Q P I R S K R R K Y V F Q C T D G S S F V E E V E R H L E C G C R A - M-Slit2

729 K S V L - - S E K CE-Slit
 1477 K K C Y D-Slit
 1523 - - - - C V S H-Slit1
 241 - - - - C A S M-Slit1
 102 - - - - C - S H-Slit2
 109 - - - - C - S M-Slit2

Alignment of human Slit-1 (SEQ ID NO:02) and Drosophila Slit-1 (SEQ ID NO:07)

1 M A A P S R T T L M P P P F R L Q L R L - L I L P I L L L L R H D A V H A E P Y D-Slit
1 M R G V G W Q - - - - - M L S L S L G L V L A I L - - - - - H-Slit1

40 S G G F G S S A V S S G G L G S V G I H I P G G V G V I T E A R C P R V C S C D-Slit
21 - N K V A P Q A C P A Q C S C H-Slit1

80 T G L N V D C S H R G L T S V P R K I S A D V E R L E L Q G N N L T V I Y E T D D-Slit
35 S G S T V D C H G L A L R S V P R N I P R N T E R L D L N G N N I T R I T K T D H-Slit1

120 F Q R L T K L R M L Q L T D N Q I H T I E R N S F Q D L V S L E R L - - - - - D-Slit
75 F A G L R H L R V L Q L M E N K I S T I E R G A F Q D L K E L E R L R L N R N H H-Slit1

154 - - - - - - - - - - - - - - - D I S N N V I T T V G R R V F K G A Q S L R D-Slit
115 L Q L F P E L L F L G T A K L Y R L D L S E N Q I Q A I P R K A F R G A V D I K H-Slit1

176 S L Q L D N N Q I T C L D E H A F K G L V E L E I L T L N N N N L T S L P H N I D-Slit
155 N L Q L D Y N Q I S C I E D G A F R A L R D L E V L T L N N N N I T R L S V A S H-Slit1

216 F G G L G R L R A L R L S D N P F A C D C H L S W L S R F L R S A T R L A P Y T D-Slit
195 F N H M P K L R T F R L H S N N L Y C D C H L A W L S D W L R K R P R V G L Y T H-Slit1

256 R C Q S P S Q L K G Q N V A D L H D Q E F K C S G L T E - H A P M - - - E C G A D-Slit
235 Q C M G P S H L R G H N V A E V Q K R E F V C S D E E E G H Q S F M A P S C S V H-Slit1

292 E N S C P H P C R C A D G I V D C R E K S L T S V P V T L P D D T T D V R L E Q D-Slit
275 L H - C P A A C T C S N N I V D C R G K G L T E I P T N L P E T I T E I R L E Q H-Slit1

332 N F I T E L P P K S F S S F R R L R R I D L S N N N I S R I A H D A L S G L K Q D-Slit
314 N T I K V I P P G A F S P Y K K L R R I D L S N N Q I S E L A P D A F Q G L R S H-Slit1

372 L T T L V L Y G N K I K D L P S G V F K G L G S L R L L L L N A N E I S C I R K D-Slit
354 L N S L V L Y G N K I T E L P K S L F E G L F S L Q L L L L N A N K I N C L R V H-Slit1

412 D A F R D L H S L S L L S L Y D N N I Q S L A N G T F D A M K S M K T V H L A K D-Slit
394 D A F Q D L H N L N L L S L Y D N K L Q T I A K G T F S P L R A I Q T M H L A Q H-Slit1

452 N P F I C D C N L R W L A D Y L H K N P I E T S G A R C E S P K R M H R R R I E D-Slit
434 N P F I C D C H L K W L A D Y L H T N P I E T S G A R C T S P R R L A N K R I G H-Slit1

492 S L R E E K F K C S - W G E L R M K L S G E C R M D S D C P A M C H C E G T T V D-Slit
474 Q I K S K K F R C S G T E D Y R S K L S G D C F A D L A C P E K C R C E G T T V H-Slit1

531 D C T G R R L K E I P R D I P L H T T E L L L N D N E L G R I S S D G L F G R L D-Slit
514 D C S N Q K L N K I P E H I P Q Y T A E L R L N N N E F T V L E A T G I F K K L H-Slit1

571 P H L V K L E L K R N Q L T G I E P N A F E G A S H I Q E L Q L G E N K I K E I D-Slit
554 P Q L R K I N F S N N K I T D I E E G A F E G A S G V N E I L L T S N R L E N V H-Slit1

611 S N K M F L G L H Q L K T L - - - - - N L D-Slit
594 Q H K M F K G L E S L K T L M L R S N R I T C V G N D S F I G L S S V R L L S L H-Slit1

627 Y D N Q I S C V M P G S F E H L N S L T S L N L A S N P F N C N C H L A W F A E D-Slit
634 Y D N Q I T T V A P G A F D T L H S L S T L N L L A N P F N C N C Y L A W L G E H-Slit1

667 C V R K K S L N G G A A R C G A P S K V R D V Q I K D L P H S E F K C S S E N S D-Slit
674 W L R K K R I V T G N P R C Q K P Y F L K E I P I Q D V A I Q D F T C D D G N D H-Slit1

707 E - G C L G D G Y C P P S C T C T G T V V A C S R N Q L K E I P R G I P A E T S D-Slit
714 D N S C S P L S R C P T E C T C L D T V V R C S N K G L K V L P K G I P R D V T H-Slit1

746 E L Y L E S N E I E Q I H Y E R I R H L R S L T R L D L S N N Q I T I L S N Y T D-Slit
754 E L Y L D G N Q F T L V P K E - L S N Y K H L T L I D L S N N R I S T L S N Q S H-Slit1

786 F A N L T K L S T L I I S Y N K L Q C L Q R H A L S G L N N L R V V S L H G N R D-Slit
793 F S N M T Q L L T L I L S Y N R L R C I P P R T F D G L K S L R L L S L H G N D H-Slit1

826 I S M L P E G S F E D L K S L T H I A L G S N P L Y C D C G L K W F S D W I K L D-Slit
833 I S V V P E G A F N D L S A L S H L A I G A N P L Y C D C N M Q W L S D W V K S H-Slit1

866 D Y V E P G I A R C A E P E Q M K D K L I L S T P S S S F V C R G R V R N D I L D-Slit
873 E Y K E P G I A R C A G P G E M A D K L L L T T P S K K F T C Q G P V D V N I L H-Slit1

906 A K C N A C F E Q P C Q N Q A Q C V A L P Q R E Y Q C L C Q P G Y H G K H C E F D-Slit
913 A K C N P C L S N P C K N D G T C N S D P V D F Y R C T C P Y G F K G Q D C D V H-Slit1

946 M I D A C Y G N P C R N N A T C T V L E - - E G R F S C Q C A P G Y T G A R C E D-Slit
953 P I H A C I S N P C K H G G T C H L K E G E E D G F W C I C A D G F E G E N C E H-Slit1

984 T N I D D C L G E I K C Q N N A T C I D G V E S Y K C E C Q P G F S G E F C D T D-Slit
993 V N V D D C - E D N D C E N N S T C V D G I N N Y T C L C P P E Y T G E L C E E H-Slit1

1024 K I Q F C S P E F N P C A N G A K C M D H F T H Y S C D C Q A G F H G T N C T D D-Slit
1032 K L D F C A Q D L N P C Q H D S K C I L T P K G F K C D C T P G Y V G E H C D I H-Slit1

1064 N I D D C Q N H M C Q N G G T C V D G I N D Y Q C R C P D D Y T G K Y C E G H N D-Slit
1072 D F D D C Q D N K C K N G A H C T D A V N G Y T C I C P E G Y S G L F C E F S P H-Slit1

1104 M I S M M Y P Q T S P C Q N H E C K H G V - C F Q P N A Q G S D Y L C R C H P G D-Slit
1112 - - P M V L P R T S P C D N F D C Q N G A Q C I - - - V R I N E P I C Q C L P G H-Slit1

1143 Y T G K W C E Y L T S I S F V H N N S F V E L E P L R T R P E A N V T I V F S S D-Slit
1147 Y Q G E K C E K L V S V N F I N K E S Y L Q I P S A K V R P Q T N I T L Q I A T H-Slit1

1183 A[E]Q[N]G[I]L[M]Y[D]G[Q]D[A]H[L]A[V]E[L]F[N]G[R]I[R]V[S]Y[D]V[G]N[H]P[V]S[T]M[Y] D-Slit
 1187 D[E]D[S]G[I]L[L]Y[K]G[D]K[D]H[I]A[V]E[L]Y[R]G[R]V[R]A[S]Y[D]T[G]S[H]P[A]S[A]I[Y] H-Slit1

 1223 [S]F[E]M[V]A[D]G[K]Y[H]A[V]E[L]L[A]I[K]K[N]F[T]L[R]V[D]R[G]L[A]R[S]I[I]N[E]G[S]N D-Slit
 1227 [S]V[E]T[I]N[D]G[N]F[H]I[V]E[L]L[A]L[D]Q[S]L[S]L[S]V[D]G[G]N[P]K[I]I[T]N[L]S[K]Q H-Slit1

 1263 D[Y]L[K]L[T]T[P]M[F]L[G]G[L]P[V]D[P]A[Q]Q[A]Y[K]N[W]Q[I]R[N]L[T]S[F]K[G]C[M]K[E] D-Slit
 1267 S[T]L[N]F[D]S[P]L[Y]V[G]G[M]P[G]K[S]N[V]A[S]L[R]Q[A]P[G]Q[N]G[T]S[F]H[G]C[I]R[N] H-Slit1

 1303 V[W]I[N]H[K]L[V]D[F]G[N]A[Q]R[Q]Q[K]I[T]P[G]C[A]L - - - - L[E]G[E]Q[Q]E[E]E[D]D D-Slit
 1307 L[Y]I[N]S[E]L[Q]D[F]Q[K]V[P]M[Q]T[G]I[L]P[G]C[E]P[C]H[K]K[V]C[A]H[G]T[C]Q[P]S[S] H-Slit1

 1339 E[Q]D[F]M[D]E - - - - - T[P]H[I]K[E]E[P]V[D]P[C]L[E]N[K]C[R]R[G]S[R]C[V]P[N]S D-Slit
 1347 Q[A]G[F]T[C]E[C]Q[E]G[W]M[G]P[L]C[D]Q[R]T[N]D[P]C[L]G[N]K[C]V[H]G[T] - [C]L[P]I[N] H-Slit1

 1373 N[A]R[D]G[Y]Q[C]K[C]K[H]G[Q]R[G]R[Y]C[D]Q[G]E[G]S[T]E[P] - - - - - D-Slit
 1386 A[F] - - S[Y]S[C]K[C]L[E]G[H]G[G]V[L]C[D]E[E]E[D]L[F]N[P]C[Q]A[I]K[C]K[H]G[K]C[R] H-Slit1

 1401 - - - - - P[T]V[T]A[A]S - - - - - T[C]R[K]E[Q]V[R]E[Y]Y[T]E[N]D - D-Slit
 1424 L[S]G[L]G[Q]P[Y]C[E]C[S]S[G]Y[T]G[D]S[C]D[R]E[I]S[C]R[G]E[R]I[R]D[Y]Y[Q]K[Q]Q[G] H-Slit1

 1423 - - - [C]R[S]R[Q]P[L]K[Y]A[K]C[V]G[G]C - [G]N[Q]C[C]A[A]K[I]V[R]R[R]K[V]R[M]V[C]S D-Slit
 1464 Y[A]A[C]Q[T]T[K]K[V]S[R]L[E]C[R]G[G]C[A]G[G]Q[C]C[G]P[L]R[S]K[R]R[K]Y[S]F[E]C[T] H-Slit1

 1459 N[N]R[K]Y[I]K[N]L[D]I[V]R[K]C[G]C[T]K[K]C[Y] D-Slit
 1504 D[G]S[S]F[V]D[E]V[E]K[V]V[K]C[G]C[T]R - [C]V[S] H-Slit1

a1
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